JC03 Rec'd PCT/PTO 06 JUN 2009

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TRANSMITTAL LETTER TO THE UNITED STATES

ATTTORNEY'S DOCKET NUMBER

DESIGNATED/ELECTED OFFICE (DO/EO/US)			30/94.93USWO					
CONCE	RNING A SUBMISSIC	U.S. APPLICATION NO. (IELFIOWN, see 37 CFR 1.5)						
PCT/US03	L APPLICATION NO. 21918	INTERNATIONAL FILING DATE 15 JULY 2003	PRIORITY DATE CLAIMED 16 DEC 2002; 16 DEC 2002					
TITLE OF INVENTION GROWTH OF REDUCED DISLOCATION DENSITY NON-POLAR GALLIUM NITRIDE BY HYDRIDE VAPOR PHASE EPITAXY								
APPLICANT(S) FOR DO/EO/US Benjamin A. Haskell, Michael D. Craven, Paul T. Fini,								
Steven P. DenBaars, James S. Speck, and Shuji Nakamura Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:								
l		incerning a submission under 35 U.S.C. 371						
2. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.								
This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.								
4. XX The U	S has been elected (Article 31).							
5. XX A co	py of the International Application	n as filed (35 U.S.C. 371(c)(2))						
a.	is attached hereto (required	only if not communicated by the Internation	nal Bureau).					
Ь.	has been communicated by	the International Bureau.						
c.	XX is not required, as the appli	cation was filed in the United States Receivi	ng Office (RO/US).					
6. L An E	inglish language translation of th	e International Application as filed (35 U.S.C	C. 371(c)(2)).					
а.	is attached hereto.							
b.	has been previously submi	tted under 35 U.S.C. 154(d)(4).						
7. 🖾 Ame	ndments to the claims of the Inte	ernational Application under PCT Article 19 (35 U.S.C. 371(c)(3))					
a.	are attached hereto (requi	red only if not communicated by the Interna-	tional Bureau).					
b.	have been communicated	by the International Bureau.						
c.		ever, the time limit for making such amendn	nents has NOT expired.					
d.	have not been made and	will not be made.						
	English language translation of the	ne amendments to the claims under PCT Art	ticle 19 (35 U.S.C. 371(c)(3)).					
I	ath or declaration of the inventor							
	inglish language translation of th le 36 (35 U.S.C. 371(c)(5)).	e annexes of the International Preliminary E	xamination Report under PCT					
Items 11 to	20 below concern document(s	s) or information included:						
11. 🔲 🛮 An I	nformation Disclosure Statement	under 37 CFR 1.97 and 1.98.						
12. 🗌 An a	ssignment document for recording	ng. A separate cover sheet in compliance wi	th 37 CFR 3.28 and 3.31 is included.					
13. A pr	eliminary amendment.							
14. An A	application Data Sheet under 37	CFR 1.76.						
15. A su	bstitute specification.	•						
16. A po	wer of attorney and/or change of	f address letter.						
17. A co	mputer-readable form of the seq	uence listing in accordance with PCT Rule 1	3ter.2 and 37 CFR 1.821- 1.825.					
18. A se	cond copy of the published Inter	national Application under 35 U.S.C. 154(d)	(4).					
19. A se	cond copy of the English langua	ge translation of the international application	under 35 U.S.C. 154(d)(4).					

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

20. L

Other items or information:

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PTO-1390 (Rev. 02-2005)
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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.					ATTORNEY'S DOCKET NUMBER			
10/537644 PCT/USO3/21918			18	30794.93USWO				
The foll	owing fees have b	een submitted			CALCULATIONS	PTO USE ONLY		
21. XX Basic national fee					\$ 300.00			
If International p	nination fee reliminary examin 3(1)-(4)ns	\$ 100.00						
Internatio International Sea	FR 1.445(a)(2)) h nal Searching Au Irch Report prepai	thority red and provided t	ne international application to o the Office.	\$100 \$400	\$ 100.00			
	TOTAL OF 21, 2				\$ 500.00			
Additional fe	e for specification	and drawings filed	d in paper over 100 sheets (exed in an electronic medium). If paper or fraction thereof.	ccluding				
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE				
- 100 =	/50 =	:		x \$250	\$			
Surcharge of \$13	30.00 for furnishing late (37 CFR 1.49		aration later than 30 months fr	om the earliest	\$			
CLAIMS	NUME	BER FILED	NUMBER EXTRA	RATE	\$			
Total claims	19	- 20 =	-0-	x \$ 50	\$ -0-			
Independent clair	ms 4	-3=	1	x \$200	\$ 200.00			
MULTIPLE DEPE	ENDENT CLAIM(S	S) (if applicable)		+ \$360	\$			
	· · · · · · · · · · · · · · · · · · ·		TOTAL OF ABOVE	CALCULATIONS =	\$ 700.00			
Applicant cla	ims small entity s	tatus. See 37 CFF	R 1.27. Fees above are reduc	ed by 1/2.				
				SUBTOTAL =	\$ 700.00			
	f \$130.00 for furni late (37 CFR 1.49		translation later than 30 mont	hs from the earliest +	\$			
TOTAL NATIONAL FEE =					\$ 700.00			
			1.21(h)). The assignment mu \$40.00 per property	st be accompanied +	\$			
			TOTAL F	EES ENCLOSED =	\$ 700.00	<u> </u>		
					Amount to be refunded:	\$		
					Amount to be charged:	\$		
a. A chec	k in the amount o	f \$	to cover the abo	ve fees is enclosed.				
b. XX Please	charge my Depo		0-0494 in the amount of	700.00 to co	over the above fees.			
c. XX The Co	mmissioner is her it No.50-0494	eby authorized to A duplicate cop	charge any additional fees whoy of this sheet is enclosed.	nich may be required,	or credit any overpaym	ent to Deposit t		
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			CFR 1.495 has not been me ion to pending status.	t, a petition to revive	(37 CFR 1.137(a) or (l	b)) must be filed		
SEND ALL COR	RESPONDENCE	TO:		4/1	1-10			
CUSTOMER	R NUMBER 2	1/5						
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	Hughes Cen							
6701 Center Drive West, Suite 1050 33,500								
Los Ange	eles, CA 9	ON NUMBER						

IN THE UNITED STATES PA

Applicant(s):

Benjamin A. Haskell, Michael D. Craven, Paul T. Fini, Steven P. DenBaars, James S.

Speck, and Shuji Nakamura

JC09 Rec'd PCT/PTO 0 6 JUN 2009

Docket:

30794.93USWO

Title:

GROWTH OF REDUCED DISLOCATION DENSTITY NON-POLAR GALLIUM

NITRIDE BY HYDRIDE VAPOR PHASE EPITAXY

CERTIFICATE OF MAILING UNDER 37 CFR 1.10

'Express Mail' mailing label number: EV 329956382 US

Date of Deposit: June 6, 2005

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria,

VA 22313-1450.

By: *Utrleue*Name: Darlene Ross

MAIL STOP PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

We are transmitting herewith the attached:

Transmittal sheet, in duplicate, containing Certificate Of Mailing Under 37 CFR 1.10.

Form PTO-1390: TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371.

The fee has been calculated as shown below in the "Claims as Filed" table.

☐ Copy of signed Declaration of Inventorship, as filed in the International Application – 2 pages.

A charge to Deposit Account in the amount of \$700.00 to cover the Total National Fee.

Return postcard.

CLAIMS AS FILED

Number of Claims Filed	In Excess of:	-	Number Extra		Rate		Fee
Basic Filing Fee (Basic national fee + Examination fee + Search fee)							\$500.00
Application Size Fee							\$0.00
Total Claims							
19	20	=	0	х	\$50.00	=	\$0.00
Independent Claims			·				
4	3	=	1	х	\$200.00	=	\$200.00
MULTIPLE DEPENDENT CI	LAIM FEE						\$0.00
TOTAL NATIONAL FEE					· · · · · · · · · · · · · · · · · · ·		\$700.00

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GATES & COOPER LLP

Howard Hughes Center 6701 Center Drive West, Suite 1050 Los Angeles, CA 90045 (310) 641-8797 Name: George H. Gates

Reg. No.: 33,500 Initials: GHG/dr